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10/046,945	01/14/2002	Steven C. Halper	97171-00006	5045

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EXAMINER	
GRAHAM, CLEMENT B	

ART UNIT	PAPER NUMBER
3696	

MAIL DATE	DELIVERY MODE
12/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/046,945	HALPER ET AL.	
	Examiner	Art Unit	
	CLEMENT B. GRAHAM	3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-24,26-38,40-52 and 54-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10, 12-24, 26-38, 40-52, 54-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10, 12-24, 26-38, 40-52, 54-56 remained pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-10, 12-24, 26-38, 40-52, 54-56, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykstra et al (Hereinafter Dykstra U.S Patent No: 6, 029, 149) in view Freeman et al (Hereinafter Fareeman U.S Patent 6, 249, 775 in view of Rosen et al (Hereinafter US Pub: 2003/0050879) .

As per claims 1-10, 12-14, Dykstra discloses an automated loan risk assessment system, comprising: means for receiving information about a loan; and
means for the loan based on a plurality of risk factors including at least two of a fraud risk factor, an underwriting risk factor and a property valuation risk factor, whereby the risk score can be used by a loan service provider in deciding whether or not to fund or insure the loan (Note abstract and see column 3 lines 32-67 and column 4-7 lines 1-67).

Dykstra fail to explicitly teach calculating a risk score for the loan.
Freeman discloses loan unit or instrument represents to the financial institution an opportunity to earn a profit on the differential between its cost of money and the amount of interest earned from the borrower. Another profit component is realizable from the servicing element of each loan entity. That is, a finite budget for labor and equipment use must be allocated when the loan is issued to service each loan over its life time. The banking trade has traditionally derived substantial revenues from the servicing of loan portfolios, to the extent that they were able to service loans at a cost below the originally calculated service allocation. Consequently, banks and other financial institutions sometimes trade loan "servicing" contracts. These contracts are routinely purchased and sold in large units since they represent income opportunities. For example, a bank which lacks a servicing department might contract with another bank to service

its loans at a set, per loan pricing arrangement. The bank that purchases the contract does so with the expectation of earning a profit on the project. If it develops later that a particular loan portfolio experiences a large rate of defaults, the extra servicing needed to collect funds on the loans might render the particular servicing contract unprofitable. In such a situation, the service organization might attempt to resell the service contract to another service organization which might be interested in it, for example, at an increased service rate.(see column 13 lines 65-67 and column 14 lines 1-67 and column 20 lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra to include calculating a risk score for the loan taught by Freeman in order to provide a system the ability of financial institutions managers to choose witch mortgage and other debt instrument application to underwrite.

Dykstra and Freeman fail to explicitly teach means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user.

However Rosen discloses the system can be utilized in conjunction with the proposed Transactional Flow Model (TFM) or can be utilized independently therefrom. The present invention resolves many of the aforementioned limitations of existing trade transaction processing systems. The present invention uses advanced process control technology, originally adapted for use with the trade transaction industry from the manufacturing process control industry. In the manufacturing process control industry, real-time artificial intelligence constructs decision trees that continuously redefine process control procedures via dynamic feedback loops, thereby permitting the manufacturing processes to continue to operate even as alert conditions are identified and rectified. In the present invention, these sophisticated mechanisms are expanded to provide real-time risk management to securities trade clearing and settlement. The present invention can monitor real-time changes in any risk management category (e.g., beta), detect changes in the performance characteristics of selected securities, and monitor real-time concentration of portfolios (see column 4 para 0031 and column 8 para0079 and column 10 para 0107 and column 12 para 1040 and column 13 para 0144).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra and Freeman to include means for assigning a risk category to the loan based on the risk score and means for displaying the risk

score and the category to a user taught by Rosen in order to control and risk and compliance management. More particularly, the invention relates to multiple balancing of all trade in real time, allowing for settlement of a trade intra-day.

As per claims 15-24, 26-28, Dykstra discloses an automated loan risk assessment system, comprising:

a mechanism adapted to receive information about a loan; and

a mechanism adapted to based on a plurality of risk factors including at least two of a fraud risk factor, an underwriting risk factor and a property valuation risk factor, whereby the risk score can be used by a loan service provider in deciding whether or not to fund or insure the loan. (Note abstract and see column 3 lines 32-67 and column 4-7 lines 1-67).

However Dykstra fail to explicitly teach calculating a risk score for the loan.

Freeman discloses loan unit or instrument represents to the financial institution an opportunity to earn a profit on the differential between its cost of money and the amount of interest earned from the borrower. Another profit component is realizable from the servicing element of each loan entity. That is, a finite budget for labor and equipment use must be allocated when the loan is issued to service each loan over its life time. The banking trade has traditionally derived substantial revenues from the servicing of loan portfolios, to the extent that they were able to service loans at a cost below the originally calculated service allocation. Consequently, banks and other financial institutions sometimes trade loan "servicing" contracts. These contracts are routinely purchased and sold in large units since they represent income opportunities. For example, a bank which lacks a servicing department might contract with another bank to service its loans at a set, per loan pricing arrangement. The bank that purchases the contract does so with the expectation of earning a profit on the project. If it develops later that a particular loan portfolio experiences a large rate of defaults, the extra servicing needed to collect funds on the loans might render the particular servicing contract unprofitable. In such a situation, the service organization might attempt to resell the service contract to another service organization which might be interested in it, for example, at an increased service rate.(see column 13 lines 65-67 and column 14 lines 1-67 and column 20 lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra to include calculating a risk score for the

loan taught by Freeman in order to provide a system the ability of financial institutions managers to choose witch mortgage and other debt instrument application to underwrite.

Dykstra and Freeman fail to explicitly teach means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user.

However Rosen discloses straight through processing, automated process control and operational risk management in real time. The system can be utilized in conjunction with the proposed Transactional Flow Model (TFM) or can be utilized independently therefrom. The present invention resolves many of the aforementioned limitations of existing trade transaction processing systems. The present invention uses advanced process control technology, originally adapted for use with the trade transaction industry from the manufacturing process control industry. In the manufacturing process control industry, real-time artificial intelligence constructs decision trees that continuously redefine process control procedures via dynamic feedback loops, thereby permitting the manufacturing processes to continue to operate even as alert conditions are identified and rectified. In the present invention, these sophisticated mechanisms are expanded to provide real-time risk management to securities trade clearing and settlement. The present invention can monitor real-time changes in any risk management category (e.g., beta), detect changes in the performance characteristics of selected securities, and monitor real-time concentration of portfolios.(see column 4 para 0031 and column 8 para0079 and column 10 para 0107 and column 12 para 1040 and column 13 para 0144).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra and Freeman to include means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user taught by Rosen in order to control and risk and compliance management. More particularly, the invention relates to multiple balancing of all trade in real time, allowing for settlement of a trade intra-day.

As per claims 29-38, 40-42, Dykstra discloses a computer-readable medium whose contents cause a computer system to assess the risk associated with funding or insuring a loan by performing the steps of:
receiving information about a loan; and

based on a plurality of risk factors including at least two of a fraud risk factor, a credit risk factor and a property valuation risk factor. (Note abstract and see column 3 lines 32-67 and column 4-7 lines 1-67).

Dykstra fail to explicitly teach calculating a risk score for the loan.

Freeman discloses loan unit or instrument represents to the financial institution an opportunity to earn a profit on the differential between its cost of money and the amount of interest earned from the borrower. Another profit component is realizable from the servicing element of each loan entity. That is, a finite budget for labor and equipment use must be allocated when the loan is issued to service each loan over its life time. The banking trade has traditionally derived substantial revenues from the servicing of loan portfolios, to the extent that they were able to service loans at a cost below the originally calculated service allocation. Consequently, banks and other financial institutions sometimes trade loan "servicing" contracts. These contracts are routinely purchased and sold in large units since they represent income opportunities. For example, a bank which lacks a servicing department might contract with another bank to service its loans at a set, per loan pricing arrangement. The bank that purchases the contract does so with the expectation of earning a profit on the project. If it develops later that a particular loan portfolio experiences a large rate of defaults, the extra servicing needed to collect funds on the loans might render the particular servicing contract unprofitable. In such a situation, the service organization might attempt to resell the service contract to another service organization which might be interested in it, for example, at an increased service rate.(see column 13 lines 65-67 and column 14 lines 1-67 and column 20 lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra to include calculating a risk score for the loan taught by Freeman in order to provide a system the ability of financial institutions managers to choose witch mortgage and other debt instrument application to underwrite.

Dykstra and Freeman fail to explicitly teach means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user.

However Rosen discloses straight through processing, automated process control and operational risk management in real time. The system can be utilized in conjunction with the proposed Transactional Flow Model (TFM) or can be utilized independently therefrom. The

present invention resolves many of the aforementioned limitations of existing trade transaction processing systems. The present invention uses advanced process control technology, originally adapted for use with the trade transaction industry from the manufacturing process control industry. In the manufacturing process control industry, real-time artificial intelligence constructs decision trees that continuously redefine process control procedures via dynamic feedback loops, thereby permitting the manufacturing processes to continue to operate even as alert conditions are identified and rectified. In the present invention, these sophisticated mechanisms are expanded to provide real-time risk management to securities trade clearing and settlement. The present invention can monitor real-time changes in any risk management category (e.g., beta), detect changes in the performance characteristics of selected securities, and monitor real-time concentration of portfolios.(see column 4 para 0031 and column 8 para0079 and column 10 para 0107 and column 12 para 1040 and column 13 para 0144).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra and Freeman to include means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user taught by Rosen in order to control and risk and compliance management. More particularly, the invention relates to multiple balancing of all trade in real time, allowing for settlement of a trade intra-day.

As per claims 43-52, 54-56, Dykstra discloses a computer-implemented method of assessing the risk associated with the funding or insuring of a loan, comprising:
receiving information about a loan; and
based on a plurality of risk factors including at least two of a fraud risk factor, an underwriting risk factor and a property valuation risk factor. (Note abstract and see column 3 lines 32-67 and column 4-7 lines 1-67).
Dykstra fail to explicitly teach calculating a risk score for the loan.
Freeman discloses loan unit or instrument represents to the financial institution an opportunity to earn a profit on the differential between its cost of money and the amount of interest earned from the borrower. Another profit component is realizable from the servicing element of each loan entity. That is, a finite budget for labor and equipment use must be allocated when the loan is issued to service each loan over its life time. The banking trade has traditionally derived

substantial revenues from the servicing of loan portfolios, to the extent that they were able to service loans at a cost below the originally calculated service allocation. Consequently, banks and other financial institutions sometimes trade loan "servicing" contracts. These contracts are routinely purchased and sold in large units since they represent income opportunities. For example, a bank which lacks a servicing department might contract with another bank to service its loans at a set, per loan pricing arrangement. The bank that purchases the contract does so with the expectation of earning a profit on the project. If it develops later that a particular loan portfolio experiences a large rate of defaults, the extra servicing needed to collect funds on the loans might render the particular servicing contract unprofitable. In such a situation, the service organization might attempt to resell the service contract to another service organization which might be interested in it, for example, at an increased service rate.(see column 13 lines 65-67 and column 14 lines 1-67 and column 20 lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra to include calculating a risk score for the loan taught by Freeman in order to provide a system the ability of financial institutions managers to choose witch mortgage and other debt instrument application to underwrite.

Dykstra and Freeman fail to explicitly teach means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user.

However Rosen discloses straight through processing, automated process control and operational risk management in real time. The system can be utilized in conjunction with the proposed Transactional Flow Model (TFM) or can be utilized independently therefrom. The present invention resolves many of the aforementioned limitations of existing trade transaction processing systems. The present invention uses advanced process control technology, originally adapted for use with the trade transaction industry from the manufacturing process control industry. In the manufacturing process control industry, real-time artificial intelligence constructs decision trees that continuously redefine process control procedures via dynamic feedback loops, thereby permitting the manufacturing processes to continue to operate even as alert conditions are identified and rectified. In the present invention, these sophisticated mechanisms are expanded to provide real-time risk management to securities trade clearing and settlement. The present invention can monitor real-time changes in any risk management category (e.g., beta),

detect changes in the performance characteristics of selected securities, and monitor real-time concentration of portfolios.(see column 4 para 0031 and column 8 para0079 and column 10 para 0107 and column 12 para 1040 and column 13 para 0144).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dykstra and Freeman to include means for assigning a risk category to the loan based on the risk score and means for displaying the risk score and the category to a user taught by Rosen in order to control and risk and compliance management. More particularly, the invention relates to multiple balancing of all trade in real time, allowing for settlement of a trade intra-day.

RESPONSE TO ARGUMENTS

4. Applicant's arguments filed 7/25/08 has been fully considered but they are not persuasive for the following reasons.

5. In response to Applicant's arguments that Dykstra and Freeman fail to teach or suggest" calculating a risk score for a loan based on a fraud risk factor, an underwriting risk factor, and a property valuation risk factor and assigning a risk category to the total risk score displaying a risk category to the user in addition to displaying the total risk score and means for receiving information about a loan; and

means for the loan based on a plurality of risk factors including at least two of a fraud risk factor, an underwriting risk factor and a property valuation risk factor, whereby the risk score can be used by a loan service provider in deciding whether or not to fund or insure the loan calculating a risk score for the loan", the Examiner disagrees with Applicant's because the limitations were addressed as stated.

Dykstra discloses an automated loan risk assessment system, comprising: means for receiving information about a loan and means for the loan based on a plurality of risk factors including at least two of a fraud risk factor, an underwriting risk factor and a property valuation risk factor, whereby the risk score can be used by a loan service provider in deciding whether or not to fund or insure the loan (Note abstract and see column 3 lines 32-67 and column 4-7 lines 1-67). Freeman discloses loan unit or instrument represents to the financial institution an opportunity to earn a profit on the differential between its cost of money and the amount of interest earned from

the borrower. Another profit component is realizable from the servicing element of each loan entity. That is, a finite budget for labor and equipment use must be allocated when the loan is issued to service each loan over its life time. The banking trade has traditionally derived substantial revenues from the servicing of loan portfolios, to the extent that they were able to service loans at a cost below the originally calculated service allocation. Consequently, banks and other financial institutions sometimes trade loan "servicing" contracts. These contracts are routinely purchased and sold in large units since they represent income opportunities. For example, a bank which lacks a servicing department might contract with another bank to service its loans at a set, per loan pricing arrangement. The bank that purchases the contract does so with the expectation of earning a profit on the project. If it develops later that a particular loan portfolio experiences a large rate of defaults, the extra servicing needed to collect funds on the loans might render the particular servicing contract unprofitable. In such a situation, the service organization might attempt to resell the service contract to another service organization which might be interested in it, for example, at an increased service rate.(see column 13 lines 65-67 and column 14 lines 1-67 and column 20 lines 1-15).

Rosen discloses the system can be utilized in conjunction with the proposed Transactional Flow Model (TFM) or can be utilized independently therefrom. The present invention resolves many of the aforementioned limitations of existing trade transaction processing systems. The present invention uses advanced process control technology, originally adapted for use with the trade transaction industry from the manufacturing process control industry. In the manufacturing process control industry, real-time artificial intelligence constructs decision trees that continuously redefine process control procedures via dynamic feedback loops, thereby permitting the manufacturing processes to continue to operate even as alert conditions are identified and rectified. In the present invention, these sophisticated mechanisms are expanded to provide real-time risk management to securities trade clearing and settlement. The present invention can monitor real-time changes in any risk management category (e.g., beta), detect changes in the performance characteristics of selected securities, and monitor real-time concentration of portfolios (see column 4 para 0031 and column 8 para0079 and column 10 para 0107 and column 12 para 1040 and column 13 para 0144).

It is obviously clear that Applicant's claimed limitations were addressed within the teachings Dykstra and Freeman and Rosen.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLEMENT B. GRAHAM whose telephone number is (571)272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frantzy Poinvil/
Primary Examiner, Art Unit 3696

CG

Nov 5, 2008